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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/829,501	04/22/2004	Takateru Imai	82643	6961	
22242 7	590 09/21/2005		EXAM	EXAMINER	
FITCH EVEN TABIN AND FLANNERY			KORNAKOV, MICHAIL		
120 SOUTH L SUITE 1600	A SALLE STREET		ART UNIT	PAPER NUMBER	
CHICAGO, II	60603-3406		1746		

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)	
Office Action Commons		10/829,501	IMAI ET AL.	
	Office Action Summary	Examiner	Art Unit	
		Michael Kornakov	1746	
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence addre	)SS
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Status				
1)⊠ 2a)□ 3)□	Responsive to communication(s) filed on <u>22 Ay</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final.		erits is
Dispositi	ion of Claims			
5)□ 6)⊠ 7)□ 8)□	Claim(s) 9-11,16 and 17 is/are pending in the address of the above claim(s) is/are withdraw Claim(s) is/are allowed.  Claim(s) 9-11,16 and 17 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or is a paragraph.	vn from consideration.		
	ion Papers	•		
10)⊠	The specification is objected to by the Examine The drawing(s) filed on 22 April 2004 is/are: a) Applicant may not request that any objection to the oreplacement drawing sheet(s) including the correction of the original than the	☑ accepted or b)☐ objected to l drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR	
Priority ι	ınder 35 U.S.C. § 119			
a)[	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority application from the International Bureau  see the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been receive I (PCT Rule 17.2(a)).	on No. <u>09/939,388</u> . ed in this National Sta	age
2)  Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	te	2)

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#### **DETAILED ACTION**

#### **Double Patenting**

- 1. Claims 16, 17 of this application conflict with claims 16, 17 of Application No. 10/829,502. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.
- Claims 1-8 and 12-15 are cancelled in the communication filed 02/22/2004.
- 3. Claims 9-11 and 16, 17 are examined on the merits.

### Claim Rejections - 35 USC § 101

- 4. 35 U.S.C. 101 reads as follows:
  - Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
- 5. Claims 9-11 are rejected under 35 U.S.C. §101 because these claims are directed to neither a "process" nor a "machine," but rather embrace or overlap two different statutory classes of invention set forth in 35 U.S.C. §101, which is drafted so as to set forth the statutory classes of invention in the alternative only.

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Each one of claims 9-11 is a "hybrid claim", which is rejected both by 101, or 112, second in a circumstance when a "hybrid claim" contains more than one statutory invention, and is indefinite because it fails to recite the boundaries sought for protection. It is unclear how the method limitations further limit or define the structure of apparatus.

#### Claim Rejections - 35 USC § 112

- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 7. Claims 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A single claim that claims both an apparatus and the method steps of using itis indefinite under 35 U.S.C. 112, second paragraph. See Ex Parte Lyell, 17 USPQ 2d ... 1548 (Bd. Pat. App. 7 Inter.1990). Such claims should also be rejected under 35 USC 101, because the claim embraces or overlaps two different statutory invention

## Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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9. Claims 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Scarola et al (U.S. 5,443,652).

Scarola discloses an apparatus for the cleaning of plastic flakes to be recycled. With regard to the cleaning device of the instant claims 16, 17, the vessel of Scarola has an entrance port for the resinous product entrance provided in the upper area of one end of the vessel and an exit port for the resin in the lower part of the container (see positions 205 and 206 on Fig.3 and col.7, lines 55-65), it has a water supply port and a drainage port (col.8, lines 21-30 and positions 306, 307, 313 on Fig.4). The rotary body having rotary shaft is in col.2, lines 15-20 (paragraph b), col.4, lines 40-45.) several agitating blades are exemplified in Example 1 in col.9, see also Fig.1, 2, 4. It is understood that the surfaces disclosed by Scarola are rough surfaces buy the virtue of used materials. In some embodiments both the entrance port and port for water supply are on the upper part of the vessel, while the exit port and the drainage port are on the lower [part of the cleaning vessel (col. 2, lines 23-29, 55-60, col.5, lines 36-40, especially, Fig. 3 and col.7, lines 55-68). Scarola teaches that smaller distances between the wall and the tip of the agitator blade increases the level of shear created by the blade and also increases the level of abrasion created when the plastic flakes strike the wall. The closer the tip of the agitator blades are to the wall of the vessel, the more efficient the abrasion, thus making the walls of the vessel abrasive or roughened.

10. Claims 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Peterson (U.S. 5,365,075).

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Peterson discloses an apparatus for automated identification of recycled plastic articles with comparison of direct and diffuse transmitted light, comprising a light source and an array of detectors positioned in a manner such as to allow simultaneous measurement of a directly transmitted light signal and a diffused light signal, the signals are compared and used to differentiation of recycled resinous material (abstract). . The device of Peterson comprises a conveyor 12 oon Fig.1, wherein the sample of crushed polymer(1) for identification is located. On Fig.1 it is also illustrated that when the object undergoes scanning a direct light beam and a detector positioned opposite the light source and the detector positioned at an oblique angle to the light path. (see col.4, lines 1-10). Again referring to FIG. 1, the light source 14 was placed approximately 20 inches from the plane of motion of the article being scanned. Light collimator 16 was a conventional lens (reads a stopper member having a light window). Light source 14 and through light detector 18 were arranged such that light beam 22 was substantially perpendicular to the plane of motion of the article being scanned. Diffuse light detector 20 was assembled similar to the through-light detector, except no neutral density filters were used. (col.5, lines 43-67, col.6, lines 1-20, Fig.1).

Taking into account the ambiguity and indefiniteness of claims 9-11, the device of Peterson is readable on the device of the instant claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kornakov whose telephone number is (571) 272-1303. The examiner can normally be reached on 9:00am - 5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

I'M. KORNAKOU

Michael Kornakov Primary Examiner Art Unit 1746

9/17/2005